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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,115	09/22/2003	Yoshinobu Utsumi	Q77538	5422
23373	7590	03/20/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				SCHEUERMANN, DAVID W
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/665,115	UTSUMI ET AL.
	Examiner David W. Scheuermann	Art Unit 2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 14 February 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1,4,7 and 10 is/are pending in the application.  
 4a) Of the above claim(s) 2,3,5,6,8 and 9 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4,7 and 10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed on 2/14/2006 have been fully considered and are persuasive; accordingly the finality of the previous Office Action is withdrawn. Note the new grounds of rejection below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 10 are rejected under 35 U.S.C. 102(a) as being unpatentable over Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION). Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) shows:

An electric rotating machine for a vehicle (see figure 1) comprising: a rotor core 6 that is fitted to a rotary shaft 12; a stator core 3 that is concentric with said rotor core and disposed on the outside of said rotor core; and a turning angle detector 20 that is disposed at one shaft end of said rotary shaft;

Said rotary shaft itself is constituted to be magnetic flux interrupting means made of a non-magnetic material, (see paragraph [0025]) for interrupting leakage flux passing onto said rotary shaft as a result of excitation of a rotor coil 10 wound on said rotor core.

As to claim 10, note that Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) refers to rotation angle or position detector 20 in the abstract, which is functionally equivalent to a resolver.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) in view of Kitazawa, JP 09065617. Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) discloses the invention substantially as claimed as set forth in the rejection of claim 1, supra. Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) does not expressly disclose, "...wherein a high-permeability magnetic bypass member is disposed between said rotor core and said turning angle detector." Kitazawa, JP 09065617 discloses a magnetic bypass member is disposed between said magnetic core and said turning angle detector, for the inherent purpose of improving signal strength by reducing interference. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to

place a high-permeability magnetic bypass member between the rotor core, which contains a magnetic core, and the turning angle detector or resolver in Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION). One of ordinary skill in the art would have been motivated to do this improve the signal strength and reduce noise in the resolver by reducing stray magnetic fields.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) in view of Maestre, US 5300884. Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) discloses the invention substantially as claimed as set forth in the rejection of claim 1, supra. Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) does not expressly disclose, "...wherein said turning angle detector is a resolver having corrugations formed on a curved outer surface of said resolver." Maestre, US 5300884 discloses a resolver having corrugations formed on a curved outer surface of said resolver, for the inherent purpose of improving signal strength. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a resolver having corrugations formed on a curved outer surface of said resolver in the combination or Youshinobu, JP 2002084724 (RELYING ON EP 1482625 A1 FOR TRANSLATION) and Mimura, JP 02099399. One of ordinary skill in the art would have been motivated to do this improve the signal strength and reduce noise.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David W. Scheuermann whose telephone number is (571) 272-2035. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached at (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



dws  
March 14, 2006



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